

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A heat exchanger, comprising:
  - a soldered heat exchanger network comprising flat tubes and corrugated ribs configured so that a liquid and/or gaseous medium can flow through the flat tubes and air can flow around the corrugated ribs, and
  - a corrugated rib having at least two rib surfaces which are arranged essentially parallel to one another and are connected by an arcuate piece joined to a flat tube, wherein the arcuate piece has a lower curvature in a middle portion than in a first outer portion and in a second outer portion.
2. (Currently Amended) The heat exchanger as claim in claim 1, wherein the rib surfaces include gills, wherein the gills are arranged as louvers.
3. (Previously Presented) The heat exchanger as claimed in claim 1, wherein the arcuate piece has in the middle portion a radius of curvature  $R1$  which is greater than a rib height  $RH$  of the corrugated rib.
4. (Previously Presented) The heat exchanger as claimed in claim 1, wherein the arcuate piece has in the first outer portion a radius of curvature  $R2$  which is lower than half a rib height  $RH$  of the corrugated rib.
5. (Previously Presented) The heat exchanger as claimed in claim 1, wherein the arcuate piece has in the second outer portion a radius of curvature  $R3$  which is greater than or equal to a radius of curvature  $R2$  in the first outer portion.
6. (Previously Presented) The heat exchanger as claimed in claim 1, wherein the arcuate piece has in the second outer portion a radius of curvature  $R3$  which is lower than a rib height  $RH$  of the corrugated rib.

7. (Previously Presented) The heat exchanger as claimed in claim 2, wherein the gills have a gill depth LP in a range of 0.5 to 1.5 mm and a gill angle  $\alpha$  in a range of 20° to 35°.
8. (Previously Presented) The heat exchanger as claimed in claim 1, wherein the corrugated rib has a rib division FP in a range of 1 to 3 mm.
9. (Previously Presented) The heat exchanger as claimed in claim 1, wherein the corrugated rib has a rib depth RT in a range of 10 to 70 mm.
10. (Previously Presented) The heat exchanger as claimed in claim 2, wherein a ratio of gill depth LP to rib division FP is in a range of 0.385 to 0.825.
11. (Previously Presented) The heat exchanger as claimed in claim 1, wherein the corrugated rib has a rib height RH in a range of 3 to 15 mm.
12. (Previously Presented) The heat exchanger as claim in claim 1, wherein the arcuate piece is soldered to the flat tube.
13. (Previously Presented) The heat exchanger as claim in claim 9, wherein the rib depth RT is in a range of 12 to 20 mm.
14. (Previously Presented) The heat exchanger as claim in claim 9, wherein the rib depth RT is in a range of 40 to 64 mm.
15. (Previously Presented) The heat exchanger as claim in claim 11, wherein the rib height RH is in a range of 6 to 10 mm.
16. (Previously Presented) The heat exchanger as claim in claim 1, wherein the heat exchanger is a coolant refrigerator or condenser for motor vehicles.

17. (New) The heat exchanger as claim in claim 1, wherein the corrugated rib is a flat rib.